

Higher Learning - Technology Serving Education

E-language

The English language is changing.

PPL, RU ready?

Unethical Behavior

*Cheating on tests, lying on applications,
stealing software, downloading MP3s*

Spring Technology Supplement



Mar / Apr 2003

Contents

FEATURES

***E-Language* 11**

The English language is changing.

PPL, R U ready?

By *Sabrina Mehra*

***Unethical Behavior* 15**

Cheating on tests, lying on applications,
stealing software, downloading MP3s

By *Jennifer Kavur*

DEPARTMENTS

***Higher Notes* 3**

- A letter from the editor

***News* 5**

- Virtual Faces Deliver Emotion to Your Inbox

***Web Sites* 7**

- EasyMixing.com
- InformeDesign
- 19th Century Schoolbooks

***Technology Supplement* 23**

- Academic Careers Online
- CSUMentor
- HorizonLive
- Journey Through Calculus
- Oxford Scholarship Online
- Personal Response System
- Screening Room
- WebAssign

***Courses and Programs* 26**

- Psychotherapist Creates Synchronous
Web-Based Course on Interpersonal
Relationships
- University of Liverpool Takes Low-Tech
Approach to Online Graduate Education

***Publications and Reports* 30**

- Faculty Choose Teaching Methods
Similar to Their Personalities
- If Professors Set Standards,
Students Will Meet Expectations
- The Internet is Being Used More For Local,
Not Long Distance, Contact



Higher Notes

Welcome to the March/April issue of Higher Learning.

Our feature article approaches lingo, technology, and the English language. The article investigates how technology is influencing students' language and grammar, and asks English professors how they feel about this change. Is IM-speak really creeping into students' essays? Are English departments constructing new guidelines to handle technology terms?

Continuing our coverage of ethics and the Internet, our second feature explores four categories of unethical behavior that students are engaging in: cheating on tests, lying on applications, stealing software, and downloading MP3s. Read about how two Columbia students were caught cheating on the GRE. Discover three methods universities are taking to prevent students from lying on their application forms. Find out why the FBI raided campuses across the U.S. while concluding the largest software piracy investigation in history. Learn more about the ongoing problem universities are

facing with students who continue to use their Internet accounts to illegally download MP3s.

For shorter stories of equal interest, visit our departments. A professor at Simon Fraser University is developing a tool that will help humans express themselves emotionally on the Internet by synchronizing virtual faces with users' speech patterns. The University of Liverpool and KIT eLearning are taking a novel approach to online graduate education that is surprisingly low-tech. Researchers at MIT have created EasyMixing, a site that functions as both a dating service and a scientific experiment on face perception. And in an attempt to make the interior design profession more credible and scientifically-based, ASID and the University of Minnesota launched InformeDesign – a site providing free access to research abstracts.

There is also the story of Mia Lobel. Five years ago, Lobel was a cyberphobic professor who couldn't even type. Today, she leads a synchronous,

Web-based course in interpersonal communications and relationships. The story recounts Lobel's move from traditional to online education, the obstacles she faced, and what the experience taught her about key differences between online and in-class environments.

This issue also includes summaries of three interesting studies recently conducted at Cornell, the University of Toronto, and Pennsylvania State University. The studies focus on teaching methods, Internet communication, and student citation habits.

Finally, our spring Technology Supplement lists objective descriptions of products and services – books, software, hardware, and Web sites – that are applicable to you. ■

Jennifer Kavur



THE TEAM

Publisher / Editor: *Wili Liberman*

Associate Editor: *Jennifer Kavur*

Advertising Manager: *Michele Newton Benson*

Art Direction: *Vinicio Scarci*

Designer / Production: *Elskelijn Boks*



HIGHER LEARNING is published by 1454119 Ontario Ltd. All rights reserved. 258 Wallace Ave. Ste. 206 Toronto, Ontario M6P 3M9 Email: teachmag@istar.ca Tel: (416) 537-2103, Fax: (416) 537-3491. Unsolicited articles, photographs, and artwork submitted are welcome but HIGHER LEARNING cannot accept responsibility for their return. Contents of this publication may be reproduced for educators' use in individual classrooms without permission. Others may not reproduce contents in any way unless given express consent by 1454119 Ontario Ltd. Although every precaution is taken to ensure accuracy, HIGHER LEARNING, or any of its affiliates, cannot assume responsibility for the content, errors, or opinions expressed in the articles or advertisements and hereby disclaim any liability to any party for any damages whatsoever.



WebCT

WebCT is the world's leading provider of integrated e-learning systems. Over 148,000 faculty members at 1,578 colleges and universities are using WebCT's products and services to transform the educational experience for more than 5.8 million students. The company's mission is to be the preferred partner of institutions that are creating total e-learning solutions, from getting started to scaling campus-wide. **WebCT** is available in 10 major world languages and a quarter of the company's installed base is located in more than 60 countries outside of North America.

Initially developed by computer science faculty under grant from The University of British Columbia in Canada, **WebCT's** academic heritage and philosophy continue to be reflected in new versions. Both the Standard and Campus Editions of **WebCT** are user-friendly, give faculty members the pedagogical flexibility to teach their own way, provide tools to enhance interaction between students and faculty, and offer the broadest selection of quality course material and well-designed content from all of the major college textbook publishers. The Campus Edition of **WebCT** also gives institutions a robust, scaleable product suitable

for large-scale implementation across multiple servers as well as features for enhanced scaling and integration with campus portals and student information systems.

WebCT.com, the e-learning hub, offers centrally hosted services that can be customized to meet the needs of individual institutions or academically oriented communities. **WebCT.com** supports excellence in online teaching and learning with mentoring programs, resources, and access to experts and colleagues in many fields. The company also offers a wide range of services that are designed and delivered by educators with deep campus experience who understand that technology is only part of the solution in creating successful e-learning environments. **WebCT's** services include implementation and technology planning, software training, faculty and course development, integration and technical consulting, premium support, all of which are customized to meet an institution's particular needs.

For more information, please visit

<http://www.webct.com/hl>

Virtual Faces Deliver Emotion to Your Inbox

An interactive arts professor at Simon Fraser University Surrey in British Columbia is developing an alternative method of email communication where senders would speak, rather than type, their messages - and recipients would watch, instead of read, their mail.

Based on Steve DiPaola's FaceSpace system (which allows users to create custom 3D faces representing their identities), the application would match a user's "virtual face" with his or her speech patterns - taking note of nuances in volume, pace, inflection, and tone. The user would speak to his or her computer, which would create a lip-synching video display. The virtual face would deliver the message with appropriate facial expressions, conveying a sense of human emotion.

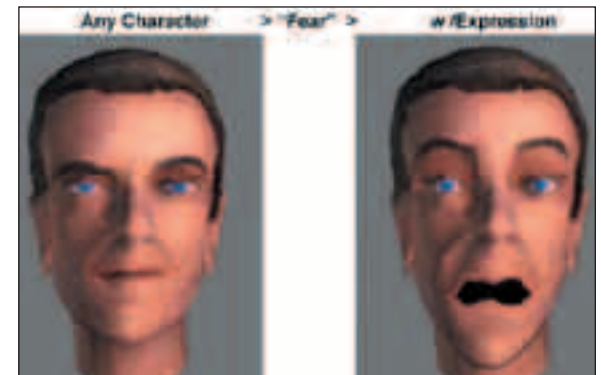
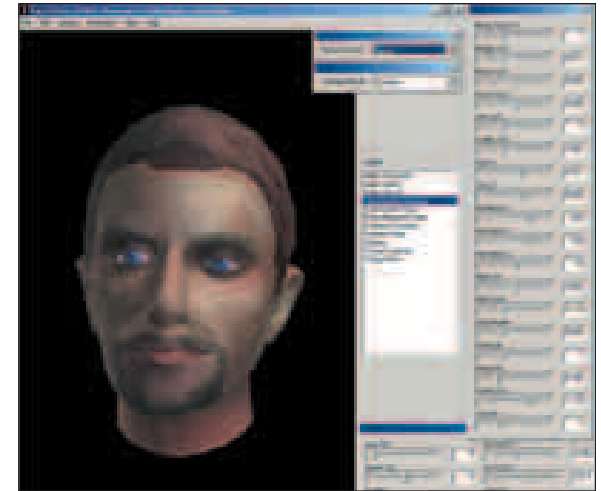
FaceSpace creates voice-driven animation using voice-stream analysis. "Since the representation of these voice responses is extremely compact, these can be sent over-the-wire to create a character that responds to voice-over IP data," DiPaola explains. "The overall effect of this is a simulated 'video-phone,' where a proxy responds to the user's voice in a way chosen by the user." A proof of concept is in the works, and DiPaola says several major companies have already expressed their interest.

Email is just one possible application of FaceSpace - a system that could also be used, for example, to create more realistic characters in

video games and movies. Emotions have always been difficult to express electronically, says DiPaola. This explains why video games tend to be action-oriented. It is much easier to create a character that can shoot rather than cry, he notes. With FaceSpace, filmmakers and game developers could create digital characters with the emotional sophistication of today's Hollywood actors. DiPaola is already speaking with Electronic Arts, a leading game developer for PlayStation, Xbox, and Nintendo systems, about the possibility of incorporating FaceSpace into their products.

"Imagine an n-dimensional space describing every humanoid face, where each dimension represents a different facial characteristic," says DiPaola. "At the core of FaceSpace is a descriptive language for specifying both the features and state of a character's face...FaceSpace uses knowledge of the human face, both anatomical and behavioral, to describe the type and expression in a compact representation. This description can be used both as an authoring scheme to describe the overall appearance of a character and as a real-time animation system to change the expression and move the lips."

The project began three years ago as an effort to understand how humans perceive facial similarity, sort faces into categories, and react to certain features. The face is "our main vehicle to transmit our feelings and explicit communications to others,"



Bottom: Two characters with the same "fear" expression applied to each. The "fear" behavior creates the impression of fear that is recognizable, but unique to each face. Note how the asymmetries inherent in the bottom character are preserved.

DiPaola notes. "Ironically, this universal expertise comes with little common understanding of what the mechanisms are that govern such talent."

DiPaola is trying to determine whether it is possible to create a universal syntax or language using face symbology. "It is hoped that we can use the FaceSpace development system to better understand the conscious and intuitive meaning of faces and the universal language they appear to represent (facial meaning, inter-relationships, and expressions) for use in the arts, cultural theory, and communication," he says.

A further application is taking place in Beijing, where a Chinese philanthropist plans to manufacture dolls with Asian features and English voice chips. The dolls will come with an instructional CD-ROM that teaches English using FaceSpace 3D animation.

DiPaola teaches art and science courses at SFU's new Surrey campus, where the Interactive Arts program is working to develop more expressive ways for humans to communicate using technology. These "expressions systems" aim to benefit human communication, says DiPaola, in contrast to current systems that pull us apart. For further information, visit DiPaola's Web site at www.dipaola.org. You may contact DiPaola directly at 604-586-6162 or sdipaola@sfu.ca. ■



**MEET 234,000 OF YOUR PEERS IN
HIGHER LEARNING MAGAZINE**

You will read the latest on the following:

- News
- Trends
- Case Studies
- Profiles
- Application Stories

We are actively seeking editorial submissions.
Please contact: Wili Liberman, Editor
Email: teachmag@istar.ca
Technology Serving Education

Tens of thousands of unwanted pets are euthanized in Ontario each year.

**Stop the downpour.
Spay or neuter your pet.**



**Ontario Society for the
Prevention of Cruelty to Animals**
1-888-ONT-SPCA www.ospca.on.ca
Protecting animals since 1873

*A registered charitable organization, # 88969 1044 RR0002
Affiliated with the RSPCA*



EasyMixing.com

www.EasyMixing.com

Developed by MIT graduate student Yuri Ostrovsky, EasyMixing is a large-scale experiment on face perception that looks at the inferences people make, the facial attributes they correspond to, and their consistency across observers. The site launched in July of 2002, under the consultation of Pawan Sinha, Assistant Professor of Visual Neuroscience at MIT and scientific advisor to the project.

"The idea came to us when we were at a café talking about another project we were working on," says Ostrovsky. "For that project, we needed some way of 'categorizing' people's faces according to how they look." Because they wanted a "human" notion of facial similarity, the researchers decided to abandon computational methods and find a way for real people to classify each other.

"But answering specific questions about how someone looks is (a) boring and (b) subject to our own biases (as researchers) about which dimensions to use for classification," Ostrovsky explains. "We finally came up with this idea of using questions that we thought could be answered based on appearance, but weren't necessarily directly about appearance."

The decision to create a Web site and conduct the experiment online was based on their need for

a large and diverse collection of faces, as well as a large number of respondents. "Precisely what the Web is good at providing," Sinha comments.

When you visit the site, the home page presents you with a person's photograph and a multiple-choice question. After you select an answer, a new page reveals the most popular reply. You can click the "more results" button for a bar graph detailing the percentage of votes for each answer, or simply continue to answer another question based on a new photo.

"By seeing the most popular answer, you see how like-minded other people are in judging a person, so you get some confirmation about your first impression," says Ostrovsky. He points out that although people may make similar judgments, their inferences are not necessarily correct. "The last thing we would want to do is to legitimize stereotypes and profiling based on appearance," says Ostrovsky. "That's not the point, and it would be a terrible misuse of our findings."

"Correct" answers are not supplied because they don't add any direct value to the research, although Ostrovsky admits that he is considering the feature. "Of course, to some extent, people probably do choose their clothes, makeup, hair-style, etc. to convey a particular image, so one would imagine that there would be some correspondence between image and personality which

is intended by the person in the picture, and that sort of correspondence would be very interesting (and acceptable) to pinpoint."

The simple Q&A format is providing valuable results. "Since users of the site only have the picture in front of them to make a decision about which answer to pick, we will get natural classification of the images based solely on appearance," says Ostrovsky. "These questions pertain to different personality traits and we can perform interesting statistical analyses of the responses to assess consistency and variance across observers," adds Sinha. "As the statistics accumulate, one can begin using them to conduct searches for faces that share similar trait profiles."



EasyMixing not only performs scientific research – it also functions as a dating service. Members can read each others’ profiles, send private messages to each other through the system, or sign up for automatic “similarity matching.” “Since there has been so much interest in it, we plan on adding personality into the mix, so that we can actually suggest matches based on how people might get along,” says Ostrovsky. Registration is free, and simply requires an uploaded photo. However, as membership grows and usage increases, the researchers may start charging a fee for dating-specific services.

Ostrovsky offers an example: “Suppose 85 percent of respondents say that Alice (a member on our site) would yell at the maitre d’ until she got a table at the restaurant. Such a consistent result would tell us that there’s something about Alice’s picture that says she might do such a thing. If Jane (another member on the site) gets a similar pattern of responses, then we might conclude that Alice and Jane look similar to each other in some way.”

The experiment, states Sinha, addresses two basic questions: 1) Can aspects of an individual’s traits (other than identity, age, and gender) be reliably assessed just from their facial appearance, and how valid are these assessments? 2) Conversely, do a collection of such assessments constrain the appearance of a face? If so, can we devise new strategies for searching large databases of faces?

Elaborating on the first, Sinha says that while most face perception research has focused on using faces as determinants of identity, age, and gender, it is possible that humans can infer much more, including emotional states and qualities of character. “For instance, people may say that a person has an ‘honest face’ or ‘looks aggressive,’” Sinha explains. “These inferences may be incorrect, but it is interesting, nevertheless, to examine what they are and which facial attributes they correspond to.”

Addressing the second question, Sinha says the experiment also asks whether traits can determine facial appearance. “One can think of each of the traits as a constraint,” he explains. “In some high-dimensional space of faces, each such constraint selects a subset of the faces. By simultaneously considering many such constraints, the size of the subset satisfying all constraints is expected to get progressively smaller. This leads to the interesting speculation that lists of such traits could possibly be used as search keys for face databases. Thus, one may be able to conduct appearance-based searches while using non-visual indices.”

Practical applications could be found, for example, in the film industry. The ability to find out exactly what it is about a face that consistently suggests a vengeful personality might be useful to cinematic make-up artists, Ostrovsky suggests.

The researchers have recently started analyzing the data. “We were pretty surprised as to how often answers are consistently chosen for a given image,” says Ostrovsky. “It’s too premature to start looking at whether we can classify people, but I think we have some pretty good evidence that

people’s ‘first impressions,’ as we like to call them, are ‘consistent.’” Whether or not the impressions are “accurate” is a separate issue. “We have no ‘ground-truth’ information about what the person is actually like,” he states.

InformeDesign

www.informedesign.umn.edu

The University of Minnesota and the American Society of Interior Designers (ASID) recently launched a Web site that links interior design with human behavior. InformeDesign contains more than 240 “practitioner-friendly” research summaries of findings from academic journals on design and human behavior. An additional 500 research summaries will be added to the Web site each year. Visitors can access the research summaries free of charge by performing keyword searches or reviewing the research summaries listed under three main categories: Space, Issues, and Occupants. The site features online discussion forums, a





calendar of research-related events, a glossary of terms, and a monthly newsletter. It also lists collaborative research opportunities.

Developed and maintained by a team of researchers at Minnesota's Department of Design, Housing and Apparel, InformeDesign was created to help designers use research as a decision-making tool in the design process. Using research findings from the InformeDesign database, designers can create more functional and responsible interiors, as well as improve the overall quality of their designs in order to protect and enhance the public's health, safety, and welfare. An increased application of research-based design could also advance the interior design profession. The site is aimed towards practitioners, students, educators, researchers, and industry representatives, but can also present housing policymakers, code officials, and hospital administrators with a resource for human behavior findings.

For further information, visit ASID at www.asid.org or the University of Minnesota at www.che.umn.edu.

19th Century Schoolbooks

<http://digital.library.pitt.edu/nietz/>

Developed by the University of Pittsburgh's Digital Research Library (DRL), 19th Century Schoolbooks contains full-text editions of ninety-nine 19th century schoolbooks from the Nietz Old Textbook Collection. The site provides page images as well as searchable text, and includes two works by collection founder John Nietz that survey historic American schools in the context of the history of education. Word searches, links to related sites, and a full bibliography of the Nietz Old Textbook Collection are also available.

As a professor in the University of Pittsburgh's School of Education, Nietz focused his teaching on the history and theory of education in the United States, and subsequently collected a 9000-volume library of early primary and secondary school texts from the 18th to the early 20th century. These early textbooks included spellers, readers, grammars, arithmetic texts, geography texts, civics and American history texts, and books on penmanship, art, and music. Upon his retirement in 1958, Nietz donated the collection to the university. The collection has grown to currently contain 15,500 catalogued pieces and approximately 2000 uncatalogued pieces, including different editions of many



titles. The publications include pre-1900 American primary and secondary textbooks, books on the history and theory of education, and writings from key figures in the field of education. The Nietz Old Textbook Collection is now one of the largest historical collections of early American schoolbooks in the country.

The 19th Century Schoolbooks digitization project began in 1997, when DRL decided to create a digital library of items selected from the collection at the recommendation of several faculty members in the English department. DRL will add more textbooks to the full-text collection this summer. ■

THE NEXT TWENTY YEARS OF YOUR LIFE



A PERSONAL GUIDE TO THE YEAR 2017

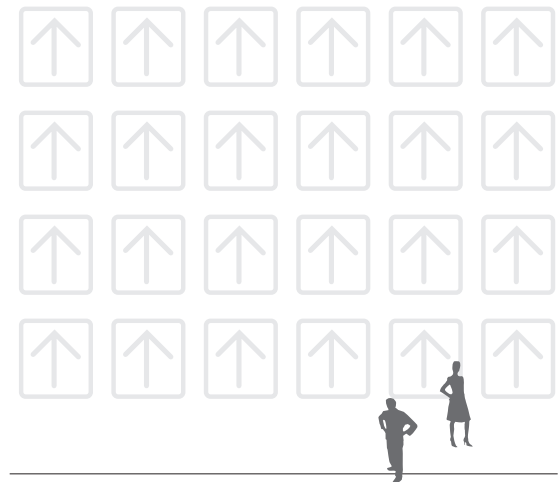
PUBLISHED BY KEY PORTER BOOKS

AVAILABLE AT MAJOR BOOKSTORES EVERYWHERE



All about the World Education Market

www.wemex.com



Discover the best and the latest in content, technology, solutions and expertise from around the world!

Contact:

Lucille Pacey
T: 1 (604) 737 1843
F: 1 (604) 737 1847
E: LucilleP@insinc.ca



E-Language:

The English Language is Changing

– PPL, R U ready?

By Sabrina Mehra

Call them E-Teens: a generation raised with unlimited access to technology and whose actions and attitudes have been undeniably affected by this continuous exposure. Today's teen demands high-speed Internet access, favours computers over pencils, and barely acknowledges the postal system as a viable form of exchanging information. When news happens on the other side of the world, today's teen expects to see it live and in colour on cable news networks. Yet despite the uniqueness of their generation, the importance of friends and social lives remains a high priority for today's teens, and technology is constantly evolving to accommodate this age-old need.

Instant messaging is at the forefront of facilitating the demand for private and expressive tech-based communication. With nearly 75 percent of American teens with Internet access regularly utilizing some form of instant messaging service (according to a 2001 study by the Pew Internet & American Life Project entitled "Teenage Life Online: The rise of the instant-message generation"), instant messaging – or IM as it has come to be known in the teenage vernacular – appears to be surpassing both the telephone and email as the communication mode of choice.





“ You don’t have to think about what you’re writing or the construction of what you’re saying. You just chatter away without recourse to commas or even spelling. ”

Paul Stanwood

The language of IM is one of short cuts and emoticons, a constantly-evolving vocabulary of lingo that could confuse even the most educated and well-versed of English-language intellectuals. In IM-speak, “because” is “b/c,” “people” are “ppl,” “by the way” is “btw,” and one does not “laugh out loud” - they “LOL.” “An IM conversation codes language into an abbreviated form by substituting quickly-written words or acronyms, and it also formats it as a script,” describes Selma Moss-Ward, a professor of English at Brown University in Providence, RI. “Reading an IM conversation is in some ways like reading a play that is meant to be spoken out loud in performance.”

And although it relies on the written word to operate, IM does not serve the same purpose, nor does it reflect the same priorities, as other more traditional forms of written English, according to Naomi Baron, author of *Alphabet to E-mail: How written English evolved and where it’s headed*. “The young adult world is a very social world, and IM is used as a means, not of sharing

information so much as becoming part of a social group and maintaining that position in that social group,” says Baron. According to Baron – a professor of linguistics and communication at American University in Washington, DC – teenagers don’t even consider IM to be writing; rather, they view it as a form of verbal communication. “It’s always, ‘I need to talk with someone so I sent them an IM,’ or ‘when I was talking to them last night on IM,’ and they’re not talking about the phone; they’re talking about instant messaging,” says Baron, who has conducted focus groups on the topic of IM use. “It’s a true mind set that says, not only is instant messaging more informal than the kind of things you submit in a formal paper to a professor, but it’s speaking. It’s almost as if the person is there.”

But whether or not teenagers see it as writing, IM and other forms of electronic communication are affecting the way teenagers put pen to paper in traditional writing situations. With a growing number of teenagers relying on IM as an essential mode of communication, and email and wireless text messaging not too far behind, more and more university professors are beginning to identify a change in the formal written work submitted to them by their tech-savvy students. Both Baron and Moss-Ward have noted infusions of IM vocabulary in student work, and the debate is on in academic circles as to whether this change is the unavoidable evolution of the English language – or a destructive force to be defeated at all costs.

“It’s clear that there is a good deal of shorthand and a new kind of language emerging, especially amongst young people, without any real reference at all to traditional English language,” says Paul Stanwood, President of the International Association of University Professors of English. Stanwood attributes this change to the relative ease and speed of IM communication. “You don’t have to think about what you’re writing or the construction of what you’re saying. You just chatter away without recourse to commas or even spelling.” For Stanwood, a professor emeritus of English at the University of British Columbia, the quality of student writing has been deteriorating for years, and the constant use of the casual shorthand of IM is only making it more difficult for students to express their ideas clearly and effectively in the academic setting. “Many people don’t try very hard to say exactly what they mean,” says Stanwood. “Messaging is almost like speaking body language, talking to each other without necessarily saying anything.”

“ After Vietnam, we adopted a new way of teaching writing that basically said, write what’s on your mind, we don’t care about spelling, express yourself, and we will grade you on how you express yourself. ”

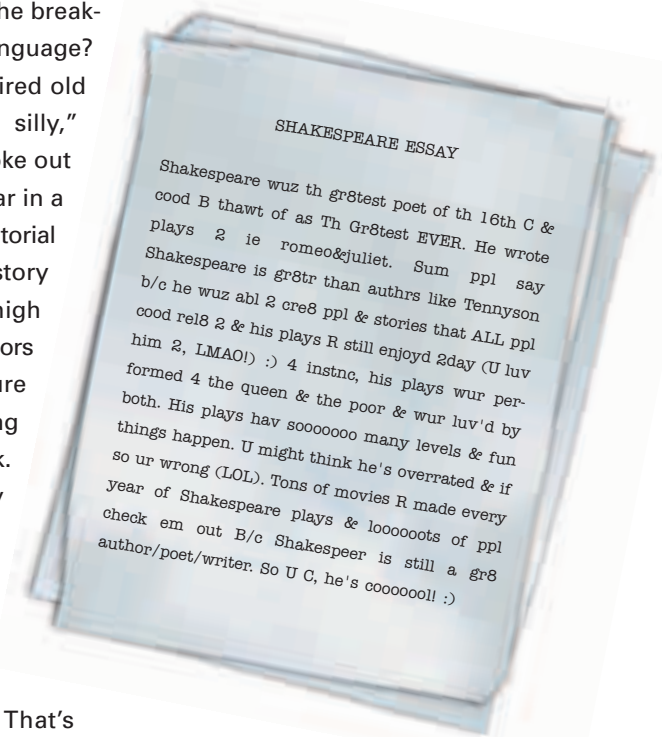
Naomi Baron

But for some professors, the use of IM short hand is not necessarily indicative of lack of forethought or an absence of consideration. When Moss-Ward noticed one of her students had edited another student’s written work (a frequent practice in her course), spelling the second-person pronoun “u” when writing comments such as “I think u should end the paragraph here,” Moss-Ward believed the student was writing “u” as an equivalent of the French or Spanish “tu,” the German “du” – making a distinction that’s available in many languages between the familiar and the formal “you.” “I speculate that this is deliberately to undercut any sense of superiority conveyed by the task of correcting implied by editing,” says Moss-Ward. “The student doesn’t feel comfortable asserting herself in this particular situation, so she wants to convey, subtly, a connection of intimacy and friendship. I am very much taken with the idea of U/You paralleling Tu/Vous, Tu/Usted, Du/Sie, etc.”

Whether from laziness or intuitiveness, the English language is changing. But the foundation for this change was laid long before IM ever entered the Western vocabulary, says Baron, who traces the shift back to a time when the priorities of English teachers changed to encourage and emphasize the expression of emotion in students’ writing. “After Vietnam, we adopted a new way of teaching writing that basically said, write what’s on your mind, we don’t care about spelling, express yourself, and we will grade you on how you express yourself,” says Baron. “It was all laid out, and we now have come to see writing as representation of informal speech, and the computer revolution and particularly the networked revolution has contributed to that and built on that base.” Combine that emphasis on informal writing styles with professors educated under that system, as well as mass media rife with disintegrating copy-editing skills and poor grammar, and Baron believes young people possess no real motivation to maintain formal language in academic situations.

But are we witnessing the breakdown of the English language? “Anyone who sings that tired old song is prescriptive and silly,” says Moss-Ward, who spoke out on the subject late last year in a Brown University-based editorial after a New York Times story featured a handful of high school teachers and professors expressing their displeasure with IM shorthand creeping into their students’ work. “English is not going to stay contained in a neat little package because someone proclaims some locution or construct right or wrong. Language is determined by usage. That’s why most really common verbs, which we use all the time, are irregular,” says Moss-Ward. “‘Went,’ not ‘goed,’ is the past tense of ‘to go’ because people reinforce that irregularity with great frequency. Slang, by the same token, will survive or disappear from a language, because of the usage. ‘Cool’ and ‘neat’ are two fairly durable slang words; ‘groovy’ and ‘hip’ are not.”

There’s no more call for a crusade to maintain the English language today than there’s been for centuries, says Baron. “New things come up in language all the time. At one point in English, we didn’t have RSVP. We borrowed it from French and we kept it as an acronym and most people don’t know what it stands for anymore, but it’s useful. It’s part of the language,” says Baron. “I have no problem whatsoever with people having a spectrum of skills, spectrum of styles, lack of capitalization or punctuation, leaving subjects out of sentences (which often happens in text messaging). So what? No problem, as long as one also has the facility to use a full, richer version of language.”



And the maintenance of that full, rich language is at the core of the debate for many professors across North America. Should the language degrade, then the entire culture is at a loss, says Baron. "If some abbreviations come in, if LOL becomes RSVP, is that okay? Sure, why not – as long as we have the rich abilities to have a wide range of vocabulary, to understand the subtle distinctions between 'can' and 'could,' that they really do mean different things and they help up express nuance that we couldn't otherwise without such distinctions," says Baron. "My concern for English is that to the extent that we're looking to teenagers and young adults to set our norms for language, we're in trouble, and the reason for being insistent upon having a rich written base is that we will all benefit intellectually and, as a result, socially."

Whether departments should institute policies to discourage the use of IM language and other related tech terminology is an issue of contention and debate. "Should English departments contrive some kind of policy regarding the inclusion or exclusion of tech terminology in student writing? I don't think it's necessary or desirable," says Moss-Ward. "My experience with professors and word processing, however, is not many feel very comfortable using computers the way I do, and probably have a hard time wrapping their minds around the terminology of computers. If a student throws a tech word into a piece of writing, the professor will probably just write 'Jargon!' in the margin of the paper with a quill pen."

What English departments can do is approach the changes in language in the way that they've always done: to encourage students to write precisely and particularly and with some real sensitivity to what words mean, says Stanwood. "I think it's harder to get students to express themselves exactly. I think it's always been hard, but it may be even harder. There will have to be more patience, more sensitivity and sympathy, to changing times," says Stanwood.

With thousands born into the tech culture every day – a new Internet user born every minute – it's clear the language, it is a-changin.' LOL. ■

Sabrina Mehra is a freelance writer and columnist based in Vancouver. She can be reached via email at sabrina@sabrinamehra.com.



Character Education + Kindness to Animals = Violence Prevention

Teaching kindness to animals is essential to any character-education program and a proven, effective way to prevent violence.

PETA Visit TeachKind.org and join the TeachKind Network to qualify for low- and no-cost classroom resources.

Unethical Behavior:

Cheating on tests, lying on applications, stealing software, downloading MP3s

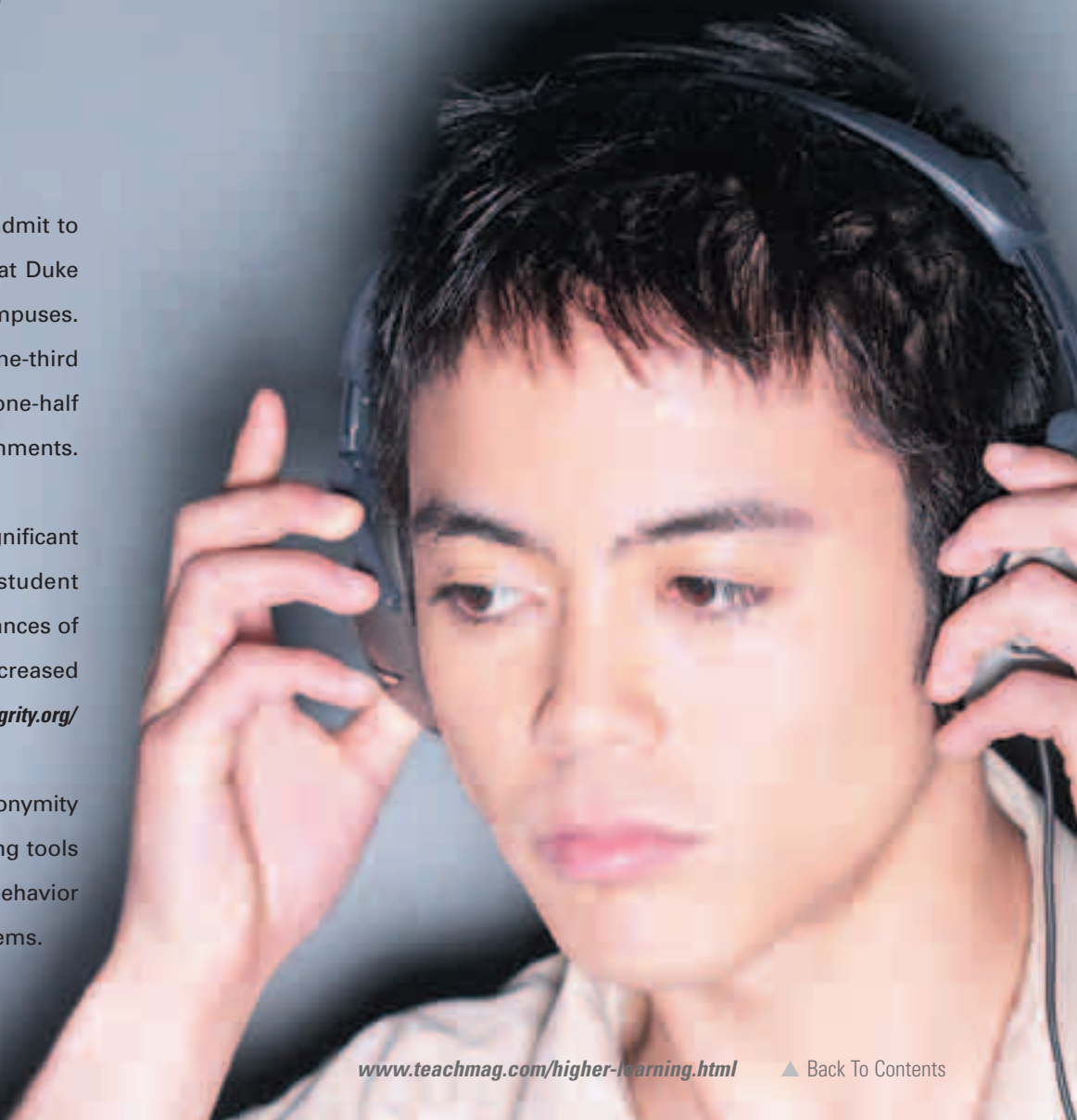
By Jennifer Kavur

Cheating, lying, theft. Over 75 percent of students across the U.S. admit to some form of cheating, says the Center for Academic Integrity (CAI) at Duke University. In 1999, CAI conducted a survey of 2100 students on 21 campuses. Addressing forms of academic dishonesty, the survey reported that one-third of the participating students admitted to serious test cheating and one-half admitted to one or more instances of serious cheating on written assignments.

(www.academicintegrity.org/cai_research.asp)

And the numbers are rising. Longitudinal comparisons at CAI show significant increases in serious test/examination cheating and unpermitted student collaboration. For example, the number of students self-reporting instances of unpermitted collaboration at 9 medium to large state universities increased from 11 percent in a 1963 survey to 49 percent in 1993. (www.academicintegrity.org/cai_research.asp)

Advancements in technology - offering speed, ease, and above all, anonymity - may be contributing to students' behaviors. At the least, it is providing tools that help. The following are examples of the various forms of unethical behavior students are engaging in - and how universities are battling the problems.



Cheating on Tests

Last fall, two Columbia University students were caught cheating on the GRE in high-tech style. Rather than sneaking in notes or looking over each other's shoulders, the duo used laptops, digital cameras, transmitters, and wireless microphones.

With a plot worth \$12,000 in equipment, 21 year-old Bryan Laulich booked an appointment at the Prometric Test Center in Garden City, NY. Claiming he suffered from respiratory problems, Laulich secured a private testing room. While taking the exam, Laulich transmitted images of the test questions to 22 year-old partner Sasha Bakhr, who was sitting in a van in the parking lot. Bakhr looked up the answers on his laptop and submitted them back to Laulich. Despite their initial efforts, the two men began experiencing problems with their transmitters and decided to abandon the exam in fear of being caught.

Their second attempt began the following week. This time, Bakhr scheduled the exam. While Bakhr waited in the reception area, Laulich snuck into the private testing room and began attaching a transmitter to the computer. A Prometric staff member walked into the room and caught Laulich fiddling with the computer. When the proctor asked Laulich what he was doing, Laulich replied that he was looking for a lost credit card. Prometric promptly called the police, who arrested the two men. On November 20, 2002, Laulich and Bakhr were arraigned on felony charges of 3rd degree burglary for electronically stealing test questions and unlawful duplication of computer materials.

Did Laulich and Bakhr expose a new trend? According to John (Jack) Killorin, Vice President of Global Security at Prometric, this was an "over-engineered" case. It was not common, and obviously, not successful. "This was a very unusual scheme to steal intellectual property and almost too clumsy to succeed," says Killorin, a former veteran Special Agent with 26 years of ATF experience.

Even feasible attempts, such as hiring a professional test taker to impersonate your identity, are rare. "Prometric Test Centers routinely stop candidates from taking prohibited material into centers, however given the number of exams delivered, the incidence of cheating is very small," says Killorin. "In the last quarter of fiscal year 2002, Prometric delivered 1,751,884 examinations around the globe. There were 167 cheating attempts documented in the same quarter, .00009%."

Security is vital to the company. Killorin could not publicly reveal all of Prometric's security measures, but he did provide a few examples. "Prometric Test Center Administrators are trained and certified and recertified annually," he says. Proctors video monitor all the examinations and must enter the examination rooms on a frequent basis. Candidates must meet identification standards to be admitted, and are given an erasable note board or scratch paper, which must be accounted for and handed in. Candidates are also prohibited from bringing certain materials such as cell phones, pagers, and calculators into the testing rooms because the devices cannot be properly checked and could contain notes. Examination materials are encrypted and cannot be launched by anyone other than authorized administrators.

If test materials are leaked, the consequences can be disastrous. The Garden City Police Department forensics division found test questions on Lulworth and Bakhrū's laptop, but concluded that the materials were not shared with other students. Had the test materials (valued at \$1 million by the ETS) been leaked, Prometric would have had to invalidate the test results and remove the test from circulation until the questions were changed. "A breach by such a means would be a major breakdown in our procedures and damaging to Prometric," says Killorin. "And while a test provider or a testing center may be the most obvious victim, the ultimate victim of cheating is the hard working, well-prepared candidate whose scores are challenged by those of a cheater."

“ ...while a test provider or a testing center may be the most obvious victim, the ultimate victim of cheating is the hard working, well-prepared candidate whose scores are challenged by those of a cheater. ”

John (Jack) Killorin

When asked whether technology is tempting more students to cheat on standardized tests, Killorin replied that most cheaters use old-fashioned methods – and that technology is helping students get caught. Computer Based Testing (CBT) is one example. "CBT allows quicker distribution of new items," says Killorin. "CBT can be scheduled in high security locations with video and audio surveillance and professional proctors. Richer item pools mean that two students testing in the same subject see different tests...techniques like adaptive testing and real time scoring change or omit exposure to the items."

And despite technology, old-fashioned prevention still works. Killorin adds, "It is worth noting that cheaters are usually caught, as in the Garden City case, by an alert proctor following established procedures."

Lying on Applications

To ensure that students are being honest on their admissions applications, various universities are implementing new policies and procedures for verifying applicants' background information.

Last fall, the Haas School of Business at the University of California at Berkeley began running background checks on all applicants slated for admission. "Our policy came as a result of the corporate scandals that have been widely publicized in the past year, which have heightened everyone's awareness of the importance of ethics in business," says Jett Pihakis, Director of Domestic Admissions for the Full-Time MBA Program.

In late January, the school discovered that 5 out of 100 applicants had lied on their application forms. Because the policy is in its first year, Pihakis says he can't comment on whether the number of students providing false information is on the rise. "I have no comparable data from past years, as we only did random spot checks of applications in the past," he says.

The University of Pennsylvania is also focusing more attention on graduate school application forms. Applicants to The Wharton School are now required to pay \$35 for an outside firm to verify their applications. The verification process is in its first year, and only applies to students who are offered admission. "Wharton decided to warn the market that we would be conducting the verification on all students who choose to matriculate," says Rosemaria Martinelli, Director of MBA Admissions & Financial Aid. "Hopefully, this will cut down on the number of students who fabricate or greatly elaborate their accomplishments in the application."

So far, all students have passed the verification check, so Martinelli can't say that more students are lying. However, she points out that it is still early in the year. "I believe...that the competitive nature of getting an MBA has caused students to think that the only way they can be admitted to a top program is to elaborate (fabricate) their accomplishments/experiences," says Martinelli. "Implementing the verification process is Wharton's way of warning the market-place that this is not true."

To ensure that undergraduate students will not fabricate their applications, the University of California system is extending its current procedure of checking high school transcripts to include a verification of students' nonacademic information. The centralized process will gather a random sample of freshman applications and ask them to verify the honors and awards, extracurricular activities, volunteer and community service, special program participation, and employment sections of their applications. If students fail to provide satisfactory documentation, their applications will be cancelled.

The Freshman Verification Policy, scheduled to begin this fall, is partially due to the system's new "comprehensive review" admissions process. Replacing UC's previous two-tiered admissions process, where each campus was required to admit 50 to 75 percent of its freshman class based solely on academic criteria such as standardized test scores and GPA, the comprehensive review allows all eight UC campuses to select their entire freshman class on the basis on 14 criteria (10 academic and 4 supplemental). Because the system is broadening its criterion from academic skill to talents and life experiences, it is becoming increasingly difficult to prove that students' claims are true.



Stealing Software

In December 2001, U.S. Customs Service Agents executed 37 search warrants in 27 cities across the U.S., marking the conclusion of the largest investigation of software piracy in American history – Operation Buccaneer. Customs says the operation was also the first federal investigation of Internet piracy to cross international borders, with law enforcement authorities in five foreign nations executing warrants simultaneously with the Americans.

Operation Buccaneer investigated a global network of cyberspace gangs – collectively referred to as the Warez community - responsible for pirating billions of dollars worth of software on the Internet. U.S. Customs estimates that the Warez community is responsible for nearly 90 percent of the Web sites that offer pirated software. According to Customs, Warez began as an underground network in the early 1990s, when computer hackers began to organize into competitive gangs that posted software on the Internet for illegal distribution. Operation Buccaneer initially focused on DrinkOrDie, which Customs describes as the oldest and most well known of the 8-10 major groups in the Warez community.

Several university campuses were included in the raids: MIT, UCLA, Duke, Purdue, and the University of Oregon. Agents seized computers and hard drives that were used to steal, store, and distribute pirated business and security software, as well as copyrighted games, music, and digital videos. According to Customs, "Computer hardware used to distribute software stolen by WAREZ groups is often secretly operated from computers at major universities and technology businesses," (www.customs.ustreas.gov/hot-new/pressrel/2001/1211-00.htm). While universities themselves are not involved in the schemes, Customs says that some students and university network administrators are Warez members.

Pennsylvania State University routinely scans its network for compromised machines, and according to university spokesman Tysen Kendig, Warez servers are frequently discovered. The university recently detected over 100 unauthorized Warez servers operating on the network.

"Students are generally not involved in the detection process," says Kendig. "These instances are the result of external attacks, and generally once a machine is compromised it becomes part of a global Warez trading network or networks." When a machine is detected, the university promptly disables the network access, removes the illegal software, and educates the computer's owner on how to avoid this from happening in the future.

Kendig explains why university networks attract Warez groups: "Universities generally have higher end computers and extremely fast external network connections. This makes bulk trading easier. University machines and home machines – with attractive, higher speed connections such as DSL and cable modems – also frequently have inexperienced system administrators who do not apply the necessary security patches correctly for the operating system or application in use. Also, some of the network security mechanisms available in corporations are not as widely deployed in university contexts, making access easier."

To protect the network, Penn State employs network-based controls such as firewalls and intrusion detection systems, says Kendig. The university also offers training for systems administrators to secure their machines more effectively, and provides them with bulletins from national and international incident response organizations. Kendig adds, "We also scan regularly for both vulnerable machines (ones that could be taken over) and compromised machines (those that already are)."

Downloading MP3s

Network system failures, rising costs of bandwidth, complaints from the RIAA, warnings from the government – one of the greatest headaches for universities these days is caused by students who continue to use their university accounts to illegally download music files.

“More than 2.6 billion music files are illegally downloaded every month on unauthorized P2P systems,” says Hilary Rosen, chairman and CEO of the Recording Industry Association of America (RIAA). “Of this number, a significant percentage of the transfers occur over campus networks,” (www.house.gov/judiciary/courts.htm).

When the infamous Napster peer-to-peer (P2P) file-sharing program started running in the summer of 1999, universities were unsure how to react. They soon recognized, however, that a huge problem was approaching. Napster flourished under three conditions: high-speed Internet connections, large bandwidth, and college-age students.

At first, the only means of combating the high traffic and large downloads was to either prohibit students from using P2P programs or completely block the programs from their networks. Oregon State University was one of the first universities in the U.S. to ban Napster from its system. Several followed, including Indiana University, Brown, Rio Grande, Northwestern, and Oxford.

Chris White, Information Services Manager at Oregon State, explains that the university didn't have a particular grudge against Napster - it had no other choice. “It's never been a copyright issue,” says White. “We had to block Napster because we had no other way to handle it. Napster was shutting down the network.”

Napster's golden years ended in the summer of 2001, but dozens of replacements followed in its place - KaZaA being the program of choice for most students today. Other systems also surfaced, such as Local Area Napster Networks (LANNs), which run exclusively within a specific university network for increased file transfer speed.

With a few years of experience now behind them, universities have found various ways to limit bandwidth consumption and monitor traffic flow. Oregon State no longer bans P2P systems, but limits student bandwidth consumption to 1 gigabyte per day. Columbia University monitors traffic volume on 10-second intervals and flags students who repeatedly download more than 1 megabyte per second. Pennsylvania State University also monitors traffic volume, limiting students in its residence halls to 1.5 gigabytes of inbound/outbound



“ More than 2.6 billion music files are illegally downloaded every month on unauthorized P2P systems. ”
Hilary Rosen

traffic per week. If students exceed the limit, the university reduces their network connection speed. After that, the university terminates their accounts.

Cornell University takes a strictly educational approach. Tracy Mitrano, Director of Computer Policy and Law and Vice President of the Office of Information Technology, says the university uses several methods to discourage and prevent students from illegally downloading MP3s. New students are required to take an online tutorial with a special section devoted to copyright issues. If students haven't completed the tutorial by the end of their first semester, their access to the network is terminated. Mitrano also sends annual notices on copyright to all students, faculty, and staff – and personally responds to every inquiry she receives. In collaboration with Educause, Cornell holds summer programs and pre-conference seminars on the topic. And the university's speaker series on Information Technology Ethics Education brings about six guest speakers to the campus each year – two or three of them will address copyright issues.

While universities have found ways to manage the high traffic and large downloads, and rarely find their networks failing, bandwidth is still rising, and so are the costs. In response to the monitoring, firewalls, and filters that universities have set in place, P2P systems have created devices to tunnel, encrypt, and port-hop their activities in order to avoid detection.

Cornell is planning to fight costs by imposing bandwidth fees. This summer, the university will begin monitoring bandwidth consumption through computer IP addresses. Cornell will charge all individual students, faculty, and staff a monthly fee for Internet service, and users consuming more than 2 gigabytes per month will be billed additional charges.

However, even universities with 5-gigabyte backbones that are not adversely affected by traffic and bandwidth face problems - complaints from the RIAA. By law, universities are required to respond to complaints from copyright holders and immediately resolve possible copyright infringement.

In 1998, the Digital Millennium Copyright Act (DMCA) was passed, which designates universities as Internet Service Providers (ISPs) to those using their networks. As an ISP, a university is not liable for the actions of those using its service, but if notified by a copyright holder that illegal activity is occurring, the university is required to investigate the situation and terminate the service. DMCA procedure is now standard practice at universities across the U.S.

According to the DMCA's "safe harbor" provision, as long as a university is not actively aware of users breaking the law, and as long as it takes action when pointed towards it, the university is safe from lawsuits. (www.loc.gov/copyright/legislation/dmca.pdf)

The number of complaints received at Oregon State varies each month. "They come in waves," says White, who estimates 1 to 20 per month. Cornell receives about 60 complaints each semester, says Mitrano, although the number rises in the summer due to new students. Pennsylvania State received 153 complaints in the 2001 school year.

RIAA complaints have been on the rise since last fall. In October of 2002, the RIAA, Motion Picture Association of America, National Music Publishers' Association, and Songwriters Guild of America issued a letter to 2300 college and university presidents. The letter emphasized the severity of the problem, asked for cooperation and assistance, and warned that complaints would significantly increase. (www.acenet.edu/washington/letters/2002/10october/universityletter.pdf)

Just a few months later, a court ruling gave the RIAA even more weight. RIAA sued Verizon Communications after the company refused to divulge the identity of one of its customers who, according to the RIAA, had used KaZaA to download about 600 songs. The RIAA traced the activity through the user's IP address, but couldn't secure the individual's name without Verizon's assistance. On January 21, 2003, Judge John D. Bates ruled in favor of the RIAA. Basing his decision on the DMCA, Judge Bates noted that copyright owners could send subpoenas to ISPs without a judge's order to obtain information about subscribers.

In theory, the RIAA has the power to subpoena universities for students' identities. However, it hasn't done so yet. Mitrano says she is not particularly alarmed about potential subpoenas for several reasons. "First, and most important, RIAA took Verizon to court because Verizon didn't cooperate," she says. "Cornell follows DMCA procedure to protect the identity of the user. Cornell takes action, so it does not give RIAA a case." Mitrano also believes that the RIAA's focus on universities is temporary. "Colleges and universities have been the focus of the RIAA for some time now because they have the big pipes and file sharing programs run on the fastest servers," she says. When broadband becomes more popular and students have avenues outside of the university, Mitrano believes the focus will shift to commodity networks. And if the RIAA

does start sending subpoenas, universities would definitely put up a fight. “If a college was sent a subpoena, it would bring a focused attempt at free speech and fair use that are very large issues for the RIAA to tackle,” she says.

“The RIAA can’t afford to sue everyone,” adds White. However, he is concerned for students, especially since no examples have been set. “Until it happens, people won’t be worried about it,” he says.

According to Charles Phelps, Provost of the University of Rochester, the RIAA doesn’t “have it out” for universities – it is just trying to enforce copyright. “The RIAA is mostly concerned about high volume,” he says. “File sharing limits bandwidth and needs high bandwidth to operate. Because universities have most of the bandwidth right now, the copyright holders look to them. The university’s role will diminish when other vendors become more popular.”

“The RIAA is mostly looking for cooperation with universities,” says Sheldon E. Steinbach, Vice President of General Counsel at the American Council on Education. “They are not likely to take subpoenas and lawsuits against universities and students lightly.”

In fact, universities and the RIAA are so cordial with each another, they recently formed the Joint Committee of the Higher Education and Entertainment Communities. “[The committee] began as a mutual interest discussion,” says Phelps, one of the members. “The two problems are not the same, but the solutions to both problems may be. Their problem is copyright – ours is bandwidth.” Comprised of university administrators and entertainment executives, the committee meets periodically to discuss P2P piracy and how they can work together to solve the problem. “There is a mutual interest in alerting those on campus that bandwidth is obstructed by large files to the detriment of other students and professors wanting to use it for academic reasons,” says Steinbach, who is also a member.

Universities are covering their bases – finding ways to lower costs, follow laws, and keep their systems running. Yet students continue to engage in the behavior, and perhaps they have nothing to fear. Only a handful of students have been sued for copyright infringement. Students may feel it would never happen to them – because it really hasn’t.

Although he’d like to say that education is more effective in preventing students from illegally downloading MP3s, White admits, “It doesn’t seem to work. Enforcement works.” He says that at Oregon State, “There is no discipline. They turn off the student’s account. Students usually don’t get punished.” White also recalls an incident at the University of Oregon, where a student was sued for copyright infringement. The university merely gave the student a probation, says White, a “slap on the wrist.”

Some feel that instead of engaging in purely defensive measures, universities should begin to take the offensive – providing harsher punishments and disciplinary measures. According to an article by Andrea L. Foster in The Chronicle of Higher Education, members of the U.S. House of Representatives told university administrators from Pennsylvania State University, the University of North Carolina, and the University of Tulsa that “the way to really convince students that illegal file sharing is wrong is to expel or prosecute them.” In February, members of the House Subcommittee on Courts, the Internet, and Intellectual Property met with Penn State President Graham Spanier, UNC President Molly Corbett Broad, and John Hale, Director of the Center for Computer Security at the University of Tulsa. According to Foster, the representatives “admonished university administrators...to get tougher with students who swap music and video material online in violation of copyright law.”

“Rep. Maxine Waters...pressed the administrators about whether they had ever expelled a student for illegal file sharing and was told no....Rep. Anthony D. Weiner...told the university administrators that their students would probably stop illegal file sharing if the computers they used for the activity suddenly ignited in flames....Rep. John Conyers Jr. ...noted that Congress had considered legislation that would require people convicted of sharing copyrighted material online to serve at least five years in prison.”
(<http://chronicle.com/free/2003/02/2003022701t.htm>)

But according to Phelps, “Copyright enforcement is not the university’s problem, just as universities are not in the alcohol patrol business. If a student gets sued, it is their problem. It is the same as if the student were caught shoplifting. The university complies with legal authorities, but wouldn’t begin to check students’ bags or open their mail to prevent theft from occurring.”



The University of Rochester enforces a three-step disciplinary process. First, the university asks the student to stop the behavior. If the behavior continues, the students' connection is terminated. On the third offence, the student may be charged with failure to act to the order of an official. Phelps points out that this is a behavioral disciplinary action akin to playing loud music. The offence is not considered academic, as are instances of plagiarism. So far, only one student has passed the third event. "The University of Rochester deals with this in the same way they deal with enforcing copyright on copy machines," says Phelps. The question he always asks is: "If it were on paper, what would we do?"

One thing that universities do not want to do is monitor content. "Universities... could look at the content and squeeze off certain types of digital material, but this violates privacy and confidentiality," says Phelps. Cornell is concerned about how student activity affects the network, says Mitrano, but it will not impose software bans or monitor content. "The system looks for volume, not content. It shapes the content down so everything can continue to work, but does not block it."

Apart from violating principals of academic freedom, privacy, and fair use, if universities began to monitor students' Internet activities, they could also face legal problems. In response to the letters from the entertainment industries

last fall, the Electronic Privacy Information Center (EPIC) sent its own letter to college and university presidents warning them to stay away from network monitoring practices.

In the letter, EPIC states that the level of monitoring required to detect file transfers would be incompatible with academic freedom, privacy, and fair use. Moreover, such monitoring practices could violate the Federal Educational Rights and Privacy Act (FERPA). A further concern is the potential for network monitoring systems to become systems of general surveillance: "Once installed on an institution's network, they could be used for copyright control today, and the control of ideas tomorrow." EPIC feels that policing and prosecuting should remain where it belongs, "in the courts." (www.epic.org/privacy/student/p2pletter.html)

Ethics is a final concern. According to Steinbach, universities not affected by P2P systems should still have a moral interest in the problem. Phelps agrees that universities need to ensure the ethical standards of the next generation. "These students are the future leaders of our society," he says.

But it may be very difficult to teach students that downloading free songs is wrong, and even more difficult to convince them to voluntarily stop. "Students claim ignorance, but most of them know what they are doing," says White.

What students may not realize, White adds, is that P2P programs can be dangerous. "The programs are set up to automatically share files on their computers," he warns. When users want to exit a P2P program, if they click on the "X" box in the top left corner, rather than quit, the program will merely minimize to the background. Inexperienced students will continue to run the program unaware, leaving their computers connected, open, and vulnerable to the rest of the world. Another danger is accidentally sharing the contents of your entire hard drive. Some students don't even realize that they can be traced through their IP addresses, says White. P2P programs also tend to be embedded with spyware that monitors students' browsing habits and behaviors.

Until universities find a way to reduce illegal file sharing while maintaining P2P technology, supporting academic freedom, and preserving user privacy, the headaches will continue - and a recent slew of letters from the motion picture industry show that even more problems are on their way. ■

Technology Supplement

Academic Careers Online

Academic Careers Online is an academic job site for teaching, post doc, endowed chairs, administrative, and senior management opportunities at community colleges, universities, and research institutes around the world. Applicants can search current job openings, submit resumes, and request email alerts for matching job opportunities. All application services are free of charge. Registration is required for resume posting and email alerts, but is not necessary for accessing the database. Employers can post job listings for a processing fee of US \$125 / CA \$195 per month. A three month job listing is available for US \$175 / CA \$269. One job listing may include multiple job openings. Job listings are posted immediately, and there is no additional charge to access the resume database. Annual contracts are available to organizations posting over ten job listings per year. For further information, call 610-254-2420, email info@AcademicCareers.com, or visit the Academic Careers Online Web site at www.AcademicCareers.com.

CSUMentor

California State University (CSU) has seen a tremendous increase in online student applications. During the two-month fall 2002 enrollment period, Internet applications increased 47.5 percent from the same period in 2001. CSU received 25,359 applications on November 30 alone, with over 2000 applications received in a single hour. CSU uses



CSUMentor, a Web-based mentor system developed by Xap Corporation, to handle its online application service. The system also provides information on admissions requirements, selecting a campus, and financing studies. A Plan for College section divides areas of interest for students at particular points in their education: middle school, high school, college, post-baccalaureate, and graduate. High school students, for example, can activate the Freshman Planner – a system that plans and tracks their high school education to meet CSU admissions requirements. California Community College students can use the Transfer Planner, which similarly tracks their college work. A Teaching Credential Information section provides information on teaching opportunities within California. To help prospective students choose the right campus, CSUMentor offers photos,

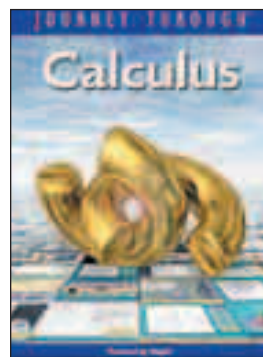
online tours, and video clips, as well as an automated Matching Assistant. An Application Filing Status Report shows which campuses are still accepting applications. For financial aid information, students can browse through the Financial Aid Overview. This section explains the entire financial aid process, describes the different types of aid available, and provides a financial aid eligibility estimate and estimated award amount. Another feature is the College Recruiter, which helps prospective students create and edit an academic profile that is sent to CSU campuses for recruitment. Xap develops regional, university-approved Mentor Web sites for institutions of higher education. For more information on Xap's online information services, visit www.xap.com. Visit CSUMentor at www.csumentor.edu.



HorizonLive

HorizonLive software allows users to interact with each other in real time on the Internet. Users can host live virtual classrooms, Web meetings, Web conferencing, Webcasts, and Web seminars. Features include live streaming audio and video, application sharing, interactive whiteboards, slide lists and carousels, chat and instant messaging, and integrated quizzes, polls, and surveys. HorizonLive's

archiving feature captures all activities of a live event, allowing educational institutions to author, repurpose, and accumulate libraries of reusable content. Using HorizonLive's server-free archive, institutions can create asynchronous course material and content. Campus administrators and instructors can manage session content, registration, attendance tracking, and access controls. HorizonLive is accessible to persons with disabilities, with features such as HTML messaging, text-only descriptions of slides, and integration with closed captioning systems. HorizonLive supports Mac, Windows, and Unix environments, and delivers any type of content viewable on a Web browser. It is effective with Internet connections as low as 28.8 kbps, accommodating on-campus broadband users and off-campus dial-up connections. For further information, call 212-533-1775, email sales@horizonlive.com, or visit HorizonLive's Web site at www.horizonlive.com



Journey Through Calculus

Journey Through Calculus is an interactive CD-ROM that uses games, tutorials, and activities to teach university-level calculus. The CD-ROM covers seven modules: A Survey of Limits, Limits of Functions, Derivatives, Derivative Calculation, Derivative Applications, Integrals, Integral Applications. Algorithmically-generated tests and quizzes give students unlimited practice with automatic grading and feedback. Interactive activities,



animated concepts, and real-world applications maintain students' interest. Developed by Brock University math professor Bill Ralph, Journey Through Calculus received the 2002 Award for Excellence in Teaching with Technology from the Office for Partnerships of Advanced Skills (OPAS). Norm Shulman, CEO of OPAS, says the committee was "extremely impressed with Journey Through Calculus and its use of animation and simulation to demonstrate very difficult mathematical concepts in such an understandable fashion." Thomson-Brooks/Cole Publishing released the CD-ROM in 1999 as a companion to James Stewart's textbook, *Calculus: Early Transcendentals*. The CD-ROM can be used with the textbook, by itself to enhance class lectures, or with any single variable calculus text. Journey Through Calculus is available from Brooks/Cole Publishing for CA \$66.56, ISBN: 0534262201. To order, visit www.brookscole.com. For further information, contact Bill Ralph directly by calling 905-688-5550 ext. 3804 or sending an email to bralph@spartan.ac.brocku.ca.

Oxford Scholarship Online

This fall, Oxford University Press (OUP) will launch Oxford Scholarship Online (OSO), a subscription-based Web site that will provide full-text access to OUP's humanities and social sciences collection. Ingenta is building the site, which will initially feature 750 current and selected backlist titles. OSO will offer comprehensive coverage of four key disciplines: economics and finance, philosophy, religion and theology, and political science. Subscribers will be able to access books and journals via title, subject, and author menus. Standard bibliographic searching will be available, as well as Boolean and full text. Books, journals, abstracts, and bibliographies will be fully linked. The site will feature regular updates on new and recently published books, specially commissioned keywords, as well as book and chapter abstracts written by original authors. Access to all of the abstracts and keywords in OSO will be freely available through a variety of services, including Ingenta.com. A site demo is available at www.oup.co.uk/academic/humanities/promotions/osodemo. For further information, visit OUP online at www.oup.co.uk or Ingenta at www.ingenta.com.



Personal Response System

The Personal Response System (PRS) is a palm-sized transmitter resembling a TV remote that facilitates interactive learning in the lecture hall. The system works by having students purchase a PRS from their campus bookstore. They register the PRS number with their professor and bring the device

with them to class. Since the PRS is tagged with their identities, students can use the device to log in their attendance. During the lecture, professors ask multiple choice questions with up to ten answers and students relay the answers via the PRS. The device is easy to operate. Students turn the PRS on, point the device to the nearest receiver on the ceiling, and press the button corresponding to the correct answer. The receiver relays the information to a computer that quickly compiles statistics on the answers and displays a results summary on an LCD display. Many professors have found the PRS to increase student interest and concentration during their lectures. It also helps professors receive immediate, live feedback on their lecture material, allowing them to modify their lectures on the spot. The PRS is already in use at several universities, including Arizona State, Georgia Tech, Harvard, MIT, Rutgers, University of British Columbia, and the University of Texas at San Antonio. It is most popular in physics and chemistry courses, but professors of sociology, biology, and psychology have also found the PRS to be useful in class. The PRS is controlled via PC serial port. Available from EduCue, a PRS “Class Pack” is available for US \$1200 and includes 30 PRS devices and 1 receiver. Other packages are also available. For further information, and to order, call 518-384-2236 or visit EduCue online at www.educue.com.

Screening Room

Screening Room is a video asset management system from Convera that provides Web access to analog and digital video recordings. User can automatically capture video, browse visual “storyboard” summaries,



voice sound tracks, create rough cuts, and publish video assets to the Web for streaming. Users can also catalog content using metadata, annotations, and closed caption text. California State University, Sacramento is currently using Screening Room to provide video archives of courses to its students in the distance and distributed education program. The system allows students to view course content on the Web within minutes of the actual lecture ending. With Screening Room’s search and retrieval technology, students can perform keyword searches to access every reference to an area of interest made during the entire course. Students accessing Screening Room via the Web must do so from Windows-based computers, as the system is not compatible with the Macintosh platform. For more information, call 1-800-788-7758, email info@convera.com, or visit Convera on the Web at www.convera.com

WebAssign

Developed at North Carolina State University, WebAssign is a Web-based course management system for university level professors. Created by physics professor John Risley, the system is currently used in NC State’s physics

and math courses. WebAssign delivers, collects, grades, and records assignments instantly. Students can use the system to access homework questions, submit their answers, and receive immediate feedback. Professors can use WebAssign to create, post, and review assignments, including practice exercises, quizzes, and tests. WebAssign’s database of textbook questions allows you to use exercises that relate directly to your lessons. Textbooks from a variety of disciplines are available, including astronomy, biology, chemistry, engineering, mathematics, physical science, physics, and statistics. If your textbook is not supported, you can either request that WebAssign add it to the database, code your questions, or enter the questions yourself. WebAssign retains the answers and scores of all submissions posted during your term, so you can monitor student progress and keep an accurate record of grades and performance. You can also upload student scores from other classroom activities and exercises, and keep their grades in the WebAssign grade book. Other features include instant email notification and real-time functionality. A Help Desk allows students to submit specific questions in the form of queries that include the question, the students’ answer, and the correct answer. WebAssign is a hosted Web-based subscription service that does not require any installation, maintenance, upgrades, or network contracts, and a support team is available 24/7. The start-up teacher fee is US \$250 for the first year, and \$150 every year for a renewal. Student fees also apply. For pricing details, email webassign@ncsu.edu. A free six-week trial is available. For further information, call 1-800-955-8275, email info@webassign.net, or visit <http://webassign.net>. ■

Courses & Programs

Psychotherapist Creates Synchronous Web-Based Course on Interpersonal Relationships

While universities are scrutinizing the merits of distance education and debating whether online courses provide meaningful levels of human interaction, a Concordia University professor is teaching an online course in improving interpersonal skills.

Interpersonal Communications and Relationships (eAHSC/230) - a 3-credit synchronous Web-based course offered by the Department of Applied Human Sciences - is unique not only within Concordia, but throughout the discipline at large. "It is readily agreed that 'relationships' cannot be taught online," says Mia Lobel, a psychotherapist and part-time faculty who designed the course. "No one else has, or is, doing this."

The course was introduced in the fall of 2001. Concordia offered about 100 asynchronous courses at the time, but Lobel's was the first to be taught in real time. With the help of three eGroup co-facilitators, Lobel conducted sessions from a computer classroom on campus. The "eClassroom" was a Java whiteboard and an HTML environment in which everyone met to share image- and text-based materials. The course consisted of two 4-hour weekend sessions followed by nine 3-hour weekly sessions. Course material was distributed into ten Independent Learning Management Modules. No face-to-face interaction took place through the 3-month period.

At the start of class, Lobel would post a story or image, which would start a discussion. Then she would assign an activity. Students were reminded to observe themselves while working on the activity. Lobel would then post a lecturette, followed by a second activity to see whether students had evolved from the first. Another unique feature of the eClassroom, namely its ability to collect and instantaneously feedback interaction data to the participants, became part of the ongoing pedagogy.

The process was extremely fast-paced, with an average twenty people posting messages per minute. Lobel says that at first, she had a hard time keeping up with all the activity. Eventually, however, she was able to simultaneously track everything, post responses, and participate in the discussions. Because the eClassroom is Web-based, there was no application to download and very few technical issues to resolve. "Within two hours, students got accustomed to the eClassroom," she says.

Lobel doesn't possess an extensive background in technology or computer-aided instruction. In fact, five years ago, she couldn't even type. Lobel says she purchased her very first computer just a few years ago to aid her poetry writing. During her first excursion on the Internet, she decided to visit an online poetry venue, and everything took off from there. Before she knew it, Lobel became the moderator, and soon started conducting her own poetry forum. "It was the ability to let your

personality out without any eyes watching that started my fascination with online interpersonal communication," she says.

It took a few more years before Lobel set her sights towards online education. "I had always equated it with correspondence education," she states. One day, when one of Lobel's friends returned from a distance education conference and began describing the experience, Lobel had an epiphany. She could teach her subjects in an online environment, providing the environment was a friendly one. The idea was novel, especially in the field of interpersonal communication and relationships - a discipline that most believed could not be taught online.

With her own funding, Lobel opened a company, Learning By Doing, through which she would develop her first online course. She started familiarizing herself with software and programming basics. Her partner Mike Neubauer operated as the Webmaster and began designing a template. Lobel began spreading her ideas to members of her department. Soon afterwards, chairperson Randy Swedburg decided to provide Lobel with the opportunity to implement her vision.

Lobel designed the course to reflect the experiential "learning by doing" pedagogy of the department. "Distance education is largely developed to deliver to a large number of students with the least amount of work," she says. In contrast, Lobel's course

required a large amount of effort on the part of the instructor, especially in its development phase. "I've put in about 30 hours of work each week for the past 1 1/2 years to create the online course, in addition to my teaching," says Lobel.

The big difference between teaching in a classroom and in an online environment lies in the preparation time. "Every word and question and instruction must be prepared in advance," says Lobel. "You need to be meticulously organized with your words. Otherwise, the potential for confusion is very high. You have to love words to do this type of work. Those with a limited vocabulary might not like it."

One of the benefits of teaching a synchronous course is seeing the outcome it has on students. According to Lobel, in a normal face-to-face class with an average 40 students, about 12 will speak out loud. Online, everyone talks at once. "For the first time, my traditionally 'quiet' students were participating," says Lobel. "Students said things that they would never share in a face-to-face class."

In an online environment, she explains, you feel safe and have more time to think. You don't need to deal with the non-verbal forms of communication that often become "communication noise." When you are online, you are also more aware of your internal weather (e.g., you have to type a smile in order to express it to others), which requires a level of introspection that takes you deeper into yourself and creates deeper bonds with others. "I still have online sessions with students from past courses," says Lobel. "People have always had closer relationships with those they correspond with. Correspondence allows you to say things you can't say otherwise."

When asked whether she prefers face-to-face or online teaching, Lobel gives points to both. "Face-to-face courses usually enroll about 60 students, while the online course had about 20," she says. "I prefer a smaller-sized online class, which is less stressful than a large face-to-face one." The online version is also more exciting. "After twenty years of teaching the same course, it is hard to keep growing. The online course is currently a creative, stimulating experience," she adds. Yet despite the smaller setting and current intrigue, in the end, Lobel admits to preferring traditional face-to-face instruction.

The merits of online pedagogy were tested this past fall when Concordia implemented a matched study of Lobel's classroom and online versions. The two courses ran concurrently with each other and were identically formulated. They featured the same curriculum, the same content and activities, the same pedagogy, the same co-facilitators, the same length of class and time frames, and the same principle instructor – Lobel.

One of the goals of the matched study was to compare the quality of data flow. Another was to challenge the hypotheses that unlike face-to-face groups, a synchronous online environment allows students to "connect from 'the inside out' and reveal themselves in new unencumbered and transparent ways to form trusting learning relationships, yet maintain a sense of privacy, in the familiar safety of their homes." A report measuring the comparisons has not yet been released. However, two interaction diagrams have been generated from the data (see Figures 1d and 2d).

In Figure 1d, each student's communication is situated along the 34 minute timeline, which clearly illustrates the serial nature of F2F communication. Participants take turns to send their verbal messages, while the Instructor's "hold of the floor" is continuous.

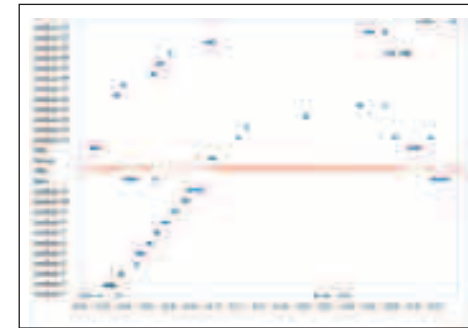


Figure 1d. Session2/F2F. Interaction Diagram unwrapped along the time axis: 34 minutes covering all the verbal interactions, during the Processing Session, after Activity 1.

It is assumed that the comparison between the graphical representations of online parallel communication (Fig. 2d) with F2F serial communication (Fig. 1d) speaks for itself.

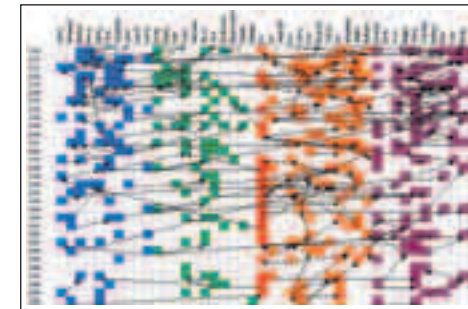


Figure 2d. Session2/Online. Interaction Diagram (GUIDATA) unwrapped along the time axis: 30 minutes covering all the verbal interactions, during the Processing Session, after Activity 1.

Lobel is currently teaching "Task Groups" - a new course built on eAHSC/230. For further information on Interpersonal Communications and Relationships, as well as other online courses Lobel has developed, visit Learning By Doing at www.learningbydoing.net. To contact Mia Lobel directly, email mia@alcor.concordia.ca or call 514-935-6268 ext. 223.

"The eClassroom used as a Teacher's Training Laboratory to Measure the Impact of Group Facilitation on Attending, Participating, Interaction, and Involvement," by Mia Lobel, Michael Neubauer, and Randy Swedburg, was published in the October 2002 issue of Athabasca University's International Review of Research in Open and Distance Learning. The article is available online at www.irrod.org/content/v3.2/Ins.html.

University of Liverpool Takes Low-Tech Approach to Online Graduate Education

The University of Liverpool, with the help of KIT eLearning, is taking a humble approach to technology with its two online Masters degrees. Rather than focus on cutting-edge technology and multimedia tools, the international programs operate exclusively with traditional, text-based materials. So far, this alternative approach to distance education has proven a great success. Only one year after their launch, the MBA and MSc in Information Technology enroll 1200 students from 66 countries around the world.

KIT develops the courses, based on existing courses at Liverpool. Liverpool reviews the courses, gives its approval, and supplies the credentials.



Faculty, recognized by Liverpool as part-time professors who are also working professionals in the field, spend three months in training. Graduates are awarded prestigious University of Liverpool degrees.

The programs are based on a series of modules and require completion of a dissertation. Each module lasts 6 to 8 weeks, followed by a 2-week break. The classes are kept small, with a maximum enrollment of 20 students per module. Five to six enrollment periods are offered each year. Students are allowed to study at their own pace, but if the courses are taken concurrently, the MBA can be completed in 18 months and the MSc in IT within 2 years.

KIT's main goal was to create programs that are international and flexible, says Shai Reshef, Chairman of KIT eLearning. In order to accomplish this, the company focused on eliminating unnecessary elements, minimizing students' time commitments, and increasing online interaction. Many aspects of the programs were simply necessary in order for the programs to function, notes Reshef. For example, the courses had to be asynchronous to accommodate the various time zones.

Despite the problems other universities are reporting with their online ventures, Liverpool is experiencing increased success. KIT predicts enrollment to grow 50 to 100 percent within the next few years. "The problem with other universities," Reshef explains, "is that they are too focused on cutting-edge technology, which is very expensive, difficult to change, and requires users to spend a lot of time downloading the course material." KIT can easily and inexpensively adjust Liverpool's curriculum because of its low-tech approach.

One of the keys to KIT's success is the convenience it offers to students. The programs are tailored to students' needs and wants - they accommodate busy time schedules, provide easy access to course material, offer affordable tuition rates, and open opportunities for international employment. KIT focuses on the students' needs, not the needs of the university, says Reshef. The elearning company spent three years studying distance education, asking professionals what they would look for in an online program, before developing the curriculum. "KIT is very close to its market," says Reshef. "Students fill out evaluation forms at the end of each module, and KIT alters the courses based on the feedback it receives."

The programs were developed specifically for professionals unable to return to school full time. Most professionals can't afford to take time away from work or quit their jobs; however, they still need the education. "One advantage for companies sponsoring students is that their employees can continue to work while studying part-time," states Reshef. Nearly seventy percent of KIT's students are sponsored by their employees.



KIT Head Office, Amsterdam, The Netherlands

Because the programs support an international student base, KIT provides a simple, fast, and inexpensive way for students to access their course material – everything is downloadable and text-based. Reshef points out that students in China, for example, don't often have personal computers at home and need to visit dial-up Internet cafes to access their courses. Since these students are charged for their time, they need to get the material as quickly and conveniently as possible. Some students may have computers, but lack broadband access.

The two programs are offered at a fixed price to all students, regardless of their geographic location. The cost is based on the average UK rate of CA \$28,000 per year. This approach is fair, but tends to benefit North American students the most. "The cost of the program varies, depending on where the student comes from," says Reshef. "This is very low for North American students, competitive for students in Britain and Europe, but expensive for those in Asia."

A University of Liverpool degree not only carries prestige, but opens doors to employment across Europe. The programs also help students establish international contacts in their field. KIT deliberately

"mixes up" the enrollment for each module to ensure that students are continually meeting new people from different countries and expanding their contacts.

The average student is about 30 years old and has at least 5 years of professional experience. At this age, and with this experience, students in the program are there to learn, collect their credentials, and make business contacts. This is why the online interaction works. According to Reshef, socializing is the least of students' concerns. KIT does not intend to replace the college experience, he says. It offers graduate programs, which are quite different.

Graduate students are interested in studying, says Reshef. There are no mandatory face-to-face gatherings, because these have no pedagogical value. "You don't need to see each other face-to-face to learn, and requiring set meetings destroys the intention to be flexible with times and dates," Reshef explains. However, KIT does arrange an annual gathering for students in each country so they can meet each other if they wish to do so.

Although students don't meet in person, their interaction occurs on a daily basis, and according to Reshef, the interaction is more intense in an online environment. Students download text-based lectures with discussion questions. They answer the discussion questions in their own time, and then post their responses online. Students can view each other's responses and comment on them. A professor moderates the discussions. The professor-student interaction is crucial to the learning process, says Reshef, and professors are required to respond to email inquiries within 24 hours.

Maintaining an international curriculum has proved to be quite a challenge. It is very difficult to

teach a class with students from many different cultures, says Reshef. For example, Chinese students don't participate in the discussions as much as students from North America do. Asians perceive this type of behavior as rude, disruptive, or even obnoxious. As a result, the North Americans end up consuming much more time and course resources. Reshef offers another example:

An American professor (who was originally from India) kept posting comments to his students, telling them how impressed he was by their knowledge. The professor even went so far to mention that he often found himself learning from them. In response, a Dutch student complained to the administration, saying that if the professor was learning from his students, he obviously wasn't qualified to be teaching the course. The administration had to explain to the student that the professor was posting those comments because according to his culture, this was polite behavior. In reality, the professor was not learning a thing.

When asked how KIT handles its competition, Reshef replied that competition is the least of its concerns. "It is the only program that is truly international and designed towards an international curriculum," he says. "KIT is not worried about competition, but rather, how do we grow?" KIT's principal concern is finding a way to maintain quality while accommodating an increasing enrollment. In the future, KIT will focus on expanding the current programs and enhancing their international presence.

For further information, visit KIT eLearning online at www.kitcampus.com. ■

Publications & Reports

Faculty Choose Teaching Methods Similar to Their Personalities

According to a recent study at Pennsylvania State University, professors tend to choose teaching methods similar to their personalities. "...college faculty use teaching techniques that reflect their perceptions of their own skill strengths," says Carol L. Colbeck, Associate Professor and Director of the Center for the Study of Higher Education. The primary teaching approach is the lecture. Lectures are time-efficient, and suit faculty faced with the constant pressure of grant proposals and publishing deadlines. However, professors who see themselves as accomplished team-builders and problem-solvers are likely to use group teaching practices more. As well, faculty are more apt to try other teaching methods once they refocus their goals, secure added instructional resources, and enhance their own self-image. Collaborative teaching practices require a greater commitment of time and resources than delivering lectures and assigning textbook problem sets, notes Robert J. Marine, Assistant Professor and Director of Medical Education Research. "If universities want professors to use more innovative approaches in their classes, administrators should invest in additional clerical and technical support," he says. Co-authored by Colbeck, Marine, and Alberto F. Cabrera, "Faculty Motivation to Use Alternative Teaching Methods" was presented at the annual meeting of the American Educational Research Association in New Orleans last spring, and is available online at <http://www.ed.psu.edu/cshe/pubs/pdf/facultymotivation.pdf>.

If Professors Set Standards, Students Will Meet Expectations

Cornell University librarians Philip Davis and Suzanne Cohen have finished their 5-year longitudinal study on the research habits of undergraduate students. While today's students tend to cite undependable Web resources in their term paper bibliographies and increasingly neglect scholarly research documents, Davis and Cohen have found that if professors set minimal bibliographic research guidelines, the number of scholarly citations returns to pre-Internet levels. The citations are still Web-based and book usage does not recover, but URLs are more dependable and refer to original sources. The basis of Davis and Cohen's study was a microeconomics class taught by economics professor John Abowd. When Abowd established minimum citation standards for his class, not only did students' Web citations slightly decrease in number, the URLs cited were more accurate and came from more reputable sources. Davis and Cohen concluded that the solution to obtaining credible sources is not to ban Web-based citations but to provide students with acceptable parameters for using the Web. "The results of this study clearly indicate that students will meet the expectations of the professor when those expectations are clearly articulated and enforced," says Davis. Davis' article, "Effect of the Web on Undergraduate Citation Behavior: Guiding Student Scholarship in a Networked Age," appears in *Portal* (Vol. 3, No. 1), and can be viewed online at http://muse.jhu.edu/journals/portal_libraries_and_the_academy/v003/3.1davis.html.

The Internet is Being Used More for Local, Not Long Distance, Contact

While the Internet is not isolating people from each other, it's not transforming communities into "global villages" either. According to University of Toronto sociologist Barry Wellman, people are using the Internet more for local, rather than long distance, contact. Using data collected in a 1998 online survey on Internet use by the National Geographic Society, Wellman's NetLab research group analyzed user profiles of more than 20,000 adults from 178 countries. "Despite people's fears, the Internet is not killing communities," says Wellman. "In fact, more people are communicating in more ways and this can be both a benefit and a burden to them." Wellman maintains that people are engaging in the same amount of face-to-face relationships as before, and that the Internet is being used to facilitate already-existing relationships. However, by using the Internet as an additional - rather than alternative - method of contact, people are also becoming overwhelmed. "On the positive side, people are in contact with others more often, but the downside is they can feel overloaded from too much contact," says Wellman. Wellman's study, "The Global Villagers: World Internet Use," is included in *The Internet in Everyday Life*, a book co-edited by Wellman and Caroline Haythornthwaite. Published by Blackwell Publishing in 2002, the book is available in paperback for US \$27.95. For further information, visit Wellman's Web site at www.chass.utoronto.ca/~wellman. ■